Taylor & Francis
Taylor & Francis Group

EUROPEAN JOURNAL OF PHYCOLOGY CONTENTS AND INDEX TO VOLUME 39 (2004)

Volume 39, Issue 1 (February 2004) – Published 17 March 2004
Volume 39, Issue 2 (May 2004) – Published 18 May 2004
Volume 39, Issue 3 (August 2004) – Published 31 August 2004
Volume 39, Issue 4 (November 2004) – Published 6 December 2004

Abbott, I.A. *see* Huisman & Sherwood
Aidar, E. *see* Lourenço, Barbarino, Lavín & Lanfer Marquez
Anderson, R.J. *see* Tronchin, de Clerck, Freshwater & Bolton
Andreakis, N., Procaccini, G. & Kooistra, W.H.C.F., *Asparagopsis taxiformis* and *Asparagopsis armata* (Bonnemaisoniales, Rhodophyta): genetic and morphological identification of Mediterranean populations 273
Axelsson, L. *see* Beer
Barbarino, E. *see* Lourenço, Lavín, Lanfer Marquez & Aidar
Beer, S. & Axelsson, L., Limitations in the use of PAM fluorometry for measuring photosynthetic rates of macroalgae at high irradiances 1
Belt, S.T. *see* Poulin, Massé, Delavault, Rousseau, Robert & Rowland
Bolch, C.J.S. & Campbell, C.N., Morphology and phylogenetic affinities of *Thecadinium foveolatum* sp. nov. (Dinophyceae: Thecadiniaceae), a new marine benthic dinoflagellate from the West of Scotland 351
Bolton, J.J. *see* Tronchin, de Clerck, Freshwater & Anderson
Broom, J.E. *see* Jones, Griffin, Jones, Nelson & Farr
Campbell, C.N. *see* Bolch
Carmichael, W.W. *see* Pereira, Li, Dias & Franca
Cavalier-Smith, T. *see* von der Heyden & Chao
Cazaubon, A. *see* Chomérat, Couté, Fayolle & Mascarell
Chao, E.E. *see* von der Heyden & Cavalier-Smith
Chepurnov, V.A. *see* Sabbe, Vyverman & Mann
Chiovitti, A., Molino, S., Crawford, S.A., Teng, R., Spurck, T. & Wetherbee, R., The glucans extracted with warm water from diatoms are mainly derived from intracellular chrysolaminaran and not extracellular polysaccharides 117
Chomérat, N., Couté, A., Fayolle, S., Mascarell, G. & Cazaubon, A., Morphology and ecology of *Oblea rotunda* (Diplopsalidaceae, Dinophyceae) from a new habitat: a brackish and hypertrophic ecosystem, the Étang de Bolmon (South of France) 317
Cicero, A.M. *see* Magaletti, Urbani, Sist & Ferrari
Claquin, P., Kromkamp, J.C. & Martin-Jezequel, V., Relationship between photosynthetic metabolism and cell cycle in a synchronized culture of the marine alga *Cylindrotheca fusiformis* (Bacillariophyceae) 33
Cock, J.M. *see* Peters, Scornet, Müller & Kloareg
Coppejans, E. *see* Hommersand & de Clerck
Couté, A. *see* Chomérat, Fayolle, Mascarell & Cazaubon
Crawford, S.A. *see* Chiovitti, Molino, Teng, Spurck & Wetherbee
Daugbjerg, N. *see* Erting & Møller Pedersen
de Baar, H.J.W. *see* van Oijen, van Leeuwe & Gieskes
de Clerck, O. *see* Hommersand & Coppejans
de Clerck, O. *see* Tronchin, Freshwater, Bolton & Anderson
De Brouwer, J.F.C. & Stal, L.J., Does warm-water extraction of benthic diatoms yield extracellular polymeric substances or does it extract intracellular chrysolaminaran? 129
Delavault, P. *see* Poulin, Massé, Belt, Rousseau, Robert & Rowland
Dias, E. *see* Pereira, Li, Carmichael & Franca
Dokulil, M. *see* Poulíčková & Duchoslav
Duchoslav, M. *see* Poulíčková & Dokulil
Eloranta, P. *see* Soininen
Erting, L., Daugbjerg, N. & Møller Pedersen, P., Nucleotide diversity within and between four species of *Laminaria* (Phaeophyceae) analysed using partial LSU and ITS rDNA sequences and AFLP 243
Farr, T.J. *see* Jones, Griffin, Jones, Nelson & Broom
Fayolle, S. *see* Chomérat, Couté, Mascarell & Cazaubon
Ferrari, C.R. *see* Magaletti, Urbani, Sist & Cicero
Franca, S. *see* Pereira, Li, Carmichael & Dias
Freshwater, D.W. *see* Tronchin, de Clerck, Bolton & Anderson
Gao, K., *see* Li
Geider, R.J. *see* Leonardos
Gerbersdorf, S. *see* Schubert, Titlyanov, Titlyanova, Granbom, Pape & Lüning

ISSN 0967-0262 print ISSN 1469-4433 online © 2004 British Phycological Society
DOI: 10.1080/09670260412332918

Gieskes, W.W.C. *see* van Oijen, van Leeuwe & de Baar
Gosek, A. *see* Popłońska, Kwiatkowska, Stępiński & Wojtczak
Goulard, F., Lüning, K. & Jacobsen, S. Circadian rhythm of photosynthesis and concurrent oscillations of transcript abundance of photosynthetic genes in the marine red alga *Grateloupia turuturu* 431
Granbom, M. *see* Schubert, Gerbersdorf, Titlyanov, Titlyanova, Pape & Lüning
Griffin, N.J. *see* Jones, Jones, Nelson, Farr & Broom
Guan, H. *see* Hu, Jiang, Hwang & Liu
Hanelt, D. *see* Marquardt
Hommersand, M.H., de Clerck, O. & Coppejans, E., A morphological study and taxonomic revision of *Euptilota* (Ceramiaceae, Rhodophyta) 369
Horiguchi, T. *see* Sekida & Okuda
Hu, X., Jiang, X., Hwang, H., Liu, S. & Guan, H., Antitumour activities of alginate-derived oligosaccharides and their sulphated substitution derivatives 67
Huisman, J.M., Abbott, I. A. & Sherwood, A.R., Large subunit rDNA gene sequences and reproductive morphology reveal *Stenopeltis* to be a member of the Liagoraceae (Nemaliales, Rhodophyta), with a description of *Akalaphycus* gen. nov. 257
Hwang, H. *see* Hu, Jiang, Liu & Guan
Isæus, M., Malm, T., Persson, S. & Svensson, A., Effects of filamentous algae and sediment on recruitment and survival of *Fucus serratus* (Phaeophyceae) juveniles in the eutrophic Baltic sea 301
Jacobsen, S. *see* Goulard & Lüning
Jiang, X. *see* Hu, Hwang, Liu & Guan
Jones, D.T. *see* Jones, Griffin, Nelson, Farr & Broom
Jones, W.A., Griffin, N.J., Jones, D.T., Nelson, W.A., Farr, T.J. & Broom, J.E., Phylogenetic diversity in South African *Porphyra* (Bangiales, Rhodophyta) determined by nuclear SSU sequence analyses 197
Kloareg, B. *see* Peters, Scornet, Müller & Cock
Kooistra, W.H.C.F. *see* Andreakis & Procaccini
Kooistra, W.H.C.F. *see* Verbruggen
Kromkamp, J.C. *see* Claquin & Martin-Jezequel
Kwiatkowska, M. *see* Popłońska, Stępiński, Gosek & Wojtczak
Lanfer Marquez, U.M. *see* Lourenço, Barbarino, Lavín & Aidar
Lavín, P.L. *see* Lourenço, Barbarino, Lanfer Marquez & Aidar
Leonardos, N. & Geider, R.J., Effects of nitrate : phosphate supply ratio and irradiance on the C : N : P stoichiometry of *Chaetoceros muelleri* 173
Li, R. *see* Pereira, Carmichael, Dias & Franca
Li, X., Yakunin, A.F. & McKay, M.L., Fe-responsive accumulation of redox proteins ferredoxin and flavodoxin in a marine cryptomonad 67
Li, Y. & Gao, K., Photosynthetic physiology and growth as a function of colony size in the cyanobacterium *Nostoc sphaeroides* 9
Liu, S. *see* Hu, Jiang, Hwang & Guan
Lourenço, S.O., Barbarino, E., Lavín, P.L., Lanfer Marquez, U.M. & Aidar, E., Distribution of intracellular nitrogen in marine microalgae: Calculation of new nitrogen-to-protein conversion factors 17
Lüning, K. *see* Goulard & Jacobsen
Lüning, K. *see* Schubert, Gerbersdorf, Titlyanov, Titlyanova, Granbom & Pape
Magaletti, E., Urbani, R., Sist, P., Ferrari, C.R. & Cicero, A.M., Abundance and chemical characterization of extracellular carbohydrates released by the marine diatom *Cylindrotheca fusiformis* under N- and P-limitation 133
Maggs, C.A. *see* Provan & Murphy
Malm, T. *see* Isæus, Persson & Svensson
Mann, D.G. *see* Sabbe, Chepurnov & Vyverman
Marquardt, J. & Hanelt, D., Carotenoid composition of *Delesseria lancifolia* and other marine red algae from polar and temperate habitats 285
Martin-Jezequel, V. *see* Claquin & Kromkamp
Mascarell, G. *see* Chomérat, Couté, Fayolle & Cazaubon
Massé, G. *see* Poulin, Belt, Delavault, Rousseau, Robert & Rowland
McKay, M.L. *see* Li & Yakunin
Meusnier, I., Valero, M., Olsen, J.L. & Stam, W.T., Analysis of rDNA ITS1 indels in *Caulerpa taxifolia* (Chlorophyta) supports a derived, incipient species status for the invasive strain 83
Molino, S. *see* Chiovitti, Crawford, Teng, Spurck & Wetherbee
Møller Pedersen, P. *see* Erting & Daugbjerg
Moriyasu, Y. & Wayne, R., A novel calcium-activated protease in *Chara corallina* 57
Müller, D.G. *see* Peters, Scornet, Kloareg & Cock
Murphy, S. *see* Provan & Maggs
Murray, S. & Patterson, D.J., *Cabra matta*, gen. nov., sp. nov., a new benthic, heterotrophic dinoflagellate 229
Nelson, W.A. *see* Jones, Griffin, Jones, Farr & Broom
Nishibori, N. & Nishijima, T., Changes in polyamine levels during growth of a red-tide causing phytoplankton *Chattonella antiqua* (Raphidophyceae) 51
Nishijima, T. *see* Nishibori
Okuda, K. *see* Sekida & Horiguchi
Olsen, J. L. *see* Meusnier, Valero & Stam

Pape, C. *see* Schubert, Gerbersdorf, Titlyanov, Titlyanova, Granbom & Lüning
Patterson, D.J. *see* Murray
Pereira, P., Li, R., Carmichael, W.W., Dias, E. & Franca, S., Taxonomy and production of paralytic shellfish toxins by the freshwater cyanobacterium *Aphanizomenon gracile* LMECYA40 361
Persson, S. *see* Isæus, Malm & Svensson
Peters, A.F., Scornet, D., Müller, D.G., Kloareg, B. & Cock, J.M., Inheritance of organelles in artificial hybrids of the isogamous multicellular chromist alga *Ectocarpus siliculosus* (Phaeophyceae) 235
Pickett-Heaps, J.D. *see* van de Meene
Popłońska, K., Kwiatkowska, M., Stępiński, D., Gosek, A. & Wojtczak, A., Immunocytochemical localization of ubiquitin and proteasomes in spermatids during spermiogenesis of *Chara vulgaris* (Charophyceae) 309
Poulíčková, A., Duchoslav, M. & Dokulil, M., Littoral diatom assemblages as bioindicators of lake trophic status: A case study from perialpine lakes in Austria 143
Poulin, M., Massé, G., Belt, S.T., Delavault, P., Rousseau, F., Robert, J.-M. & Rowland, S.J., Morphological, biochemical and molecular evidence for the transfer of *Gyrosigma nipkowii* Meister to the genus *Haslea* (Bacillariophyta) 181
Procaccini, G. *see* Andreakis & Kooistra
Provan, J., Murphy, S. & Maggs, C.A., Universal plastid primers for Chlorophyta and Rhodophyta 43
Robert, J.-M. *see* Poulin, Massé, Belt, Delavault, Rousseau & Rowland
Rodríguez-Prieto, C. *see* Vergés & Utgé
Rousseau, F. *see* Poulin, Massé, Belt, Delavault, Robert & Rowland
Rowland, S.J. *see* Poulin, Massé, Belt, Delavault, Rousseau & Robert
Sabbe, K., Chepurnov, V.A., Vyverman, W. & Mann, D.G., Apomixis in *Achnanthes* (Bacillariophyceae); development of a model system for diatom reproductive biology 327
Schubert, H., Gerbersdorf, S., Titlyanov, E., Titlyanova, T., Granbom, M., Pape, C. & Lüning, K., Circadian rhythm of photosynthesis in *Kappaphycus alvarezii* (Rhodophyta): independence of the cell cycle and possible photosynthetic clock targets 423
Scornet, D. *see* Peters, Müller, Kloareg & Cock
Sekida, S., Horiguchi, T. & Okuda, K., Development of thecal plates and pellicle in the dinoflagellate *Scrippsiella hexapraecingula* (Peridiniales, Dinophyceae) elucidated by changes in stainability of the associated members 105
Sherwood, A.R. *see* Huisman & Abbott
Sist, P. *see* Magaletti, Urbani, Ferrari & Cicero
Soininen, J. & Eloranta, P., Seasonal persistence and stability of diatom communities in rivers: are there habitat specific differences? 153
Spurck, T. *see* Chiovitti, Molino, Crawford, Teng & Wetherbee
Stępiński, D. *see* Popłońska, Kwiatkowska, Gosek & Wojtczak
Stal, L.J. *see* De Brouwer
Stam, W.T. *see* Meusnier, Valero & Olsen
Steen, H., Effects of reduced salinity on reproduction and germling development in *Sargassum muticum* (Phaeophyceae, Fucales) 293
Svensson, A. *see* Isæus, Malm & Persson
Teng, R. *see* Chiovitti, Molino, Crawford, Spurck & Wetherbee
Titlyanov, E. *see* Schubert, Gerbersdorf, Titlyanova, Granbom, Pape & Lüning
Titlyanova, T. *see* Schubert, Gerbersdorf, Titlyanov, Granbom, Pape & Lüning
Tronchin, E.M., de Clerck, O., Freshwater, D.W., Bolton, J.J. & Anderson, R.J., *Ptilophora leliaertii* and *Ptilophora coppejansii*, two new species of Gelidiales (Rhodophyta) from South Africa 395
Urbani, R. *see* Magaletti, Sist, Ferrari & Cicero
Utgé, J.Ma. *see* Vergés & Rodríguez-Prieto
Valero, M. *see* Meusnier, Olsen & Stam
van de Meene, A.M.L. & Pickett-Heaps, J.D., Valve morphogenesis in the centric diatom *Rhizosolenia setigera* (Bacillariophyceae, Centrales) and its taxonomic implications 93
van Leeuwe, M.A. *see* van Oijen, Gieskes & de Baar
van Oijen, T., van Leeuwe, M.A., Gieskes, W.W.C. & de Baar, H.J.W., Effects of iron limitation on photosynthesis and carbohydrate metabolism in the Antartic diatom *Chaetoceros brevis* (Bacillariophyceae) 161
Verbruggen, H. & Kooistra, W.H.C.F., Morphological characterization of lineages within the calcified tropical seaweed genus *Halimeda* (Bryopsidales, Chlorophyta) 213
Vergés, A., Utgé, J.Ma. & Rodríguez-Prieto, C., Life histories of *Predaea ollivieri* and *P. pusilla* (Nemastomatales, Rhodophyta) 411
von der Heyden, S., Chao, E.E. & Cavalier-Smith, T., Genetic diversity of goniomonads: an ancient divergence between marine and freshwater species 343
Vyverman, W. *see* Sabbe, Chepurnov & Mann
Wayne, R. *see* Moriyasu
Wetherbee, R. *see* Chiovitti, Molino, Crawford, Teng & Spurck
Wojtczak, A. *see* Popłońska, Kwiatkowska, Stępiński & Gosek
Yakunin, A.F. *see* Li & McKay

SUBJECT INDEX

1,3-β-D-glucan, 117
16S rRNA, 361
18S rDNA, 197
18S rRNA phylogeny, 343
^{1}H nuclear magnetic resonance, 117
Achnanthes, 327
actin, 93
AFLP, 243
Akalaphycus gen. nov., 257
algae, 369
alginate-derived oligosaccharides, 67
amino acids, 17
antibody, 73
antitumour activity, 67
Aphanizomenon gracile, 361
apomixis, 327
Asparagopsis armata, 273
Asparagopsis taxiformis, 273
auxosporulation, 327
Bacillariophyceae, 327
Bangiales, 197
Bangiophycidae, 197
benthic diatoms, 117
benthic, 229
bioindicators, 143
brackish water, 317
breeding system, 327
Cabra, 229
calcium, 57
calpain, 57
carbohydrate analysis, 117
carbohydrates, 161
carbon, 17, 173
carotenoid, 285
Caulerpa taxifolia, 83
cell covering, 105
cell stoichiometry, 173
cell-cycle, 33
cellulose microfibril, 105
cellulose-synthesizing terminal complex, 105
Ceramiaceae, 369
Chaetoceros muelleri, 173
Chara, 57
Chara vulgaris, 309
Chattonella antiqua, 51
chlorophyll, 17
Chlorophyta, 43
chloroplast, 43, 235
chrysolaminaran, 117
circadian rhythm, 423, 431
colony size, 9
*cox*2–3 spacer, 273
cryptomonad, 73
cryptomonads, 343
culture, 411
cyanobacteria, 361
Cylindrotheca fusiformis, 33, 133
Delesseria lancifolia (Rhodophyta), 285
diatom, 33, 93
diatoms, 133, 143, 153, 161, 181, 327
DIC, 9
dinoflagellate, 105, 351
Dinophyceae, 229, 351
DNA analysis, 181
DNA, 351
ecology, 317
Euptilota, 369
Euptilota molle comb. nov., 369
Eutrophication, 301
exopolysaccharides, 133
extracellular polymeric substances (EPS), 117
'*Falkenbergia*', 273
ferridoxin, 73
flavodoxin, 73
fluorescence microscopy, 117
freeze fracture, 105
freshwater, 343
Gelidiales, 395
genetic divergence, 343
genetic markers, 43
germlings, 293
Goniomonas, 343
growth rate, 9
growth, 51
Gyrosigma, 181
habitat, 153
Halimeda, 213
Haslea, 181
HBI, 181
heterotrophic dinoflagellate, 317
heterotrophic, 229
hypertrophic pond, 317
immunocytochemistry, 117
incipient species, 83
indels, 83
inheritance, 235
intracellular inorganic nitrogen, 17
invasive species, 83
iron, 73, 161
irradiance, 431
ITS, 83
ITS1, 235
Kappaphycus, 423
kelps, 243
labiate process, 93
Laminaria digitata, 243
Laminaria faeroensis, 243
Laminaria hyperborea, 243
Laminaria saccharina, 243

Liagoraceae, 257
life cycle, 327
life histories, 411
light, 9
littoral, 143
LSU rDNA, 243, 273
LSU, 395
macroalgae, 301
marine algae, 235
marine macroalgae, 1, 431
marine microalgae, 17, 285
marine, 343
Mediterranean area, 317
Mediterranean, 273
Mehler reaction, 33
MGBG, 51
microtubule, 93
mitochondrial respiration, 33
mitochondrion, 235
mitosis, 423
model system, 327
morphogenesis, 93
morphology, 213, 317, 369
morphotypes, 243, 343
mucilage, 133
N : P, 173
Nemaliales, 257
Nemastomataceae, 411
Nemastomatales, 411
new combination, 181
nitrogen, 17, 133, 173
nitrogen-to-protein conversion factors, 17
Nostoc sphaeroides, 9
nuclear SSU, 197
nucleic acids, 17
nucleotide diversity, 243
Oblea rotunda, 317
paralytic shellfish toxins, 361
PATAg-staining, 105
patchy distribution, 301
pellicle, 105
persistence, 153
Phaeophyceae, 235
phosphorus, 133, 173
photoinhibition, 9
photorespiration, 33
photosynthesis, 1, 9, 33, 161, 423, 431
phycoerythrin, 431
phylogenetics, 197
phylogeny, 73, 213, 273, 351
phytoplankton, 161
Polysiphonia fucoides, 301
Porphyra, 197
pigments, 161
plastid, 43
Podolampaceae, 229
polyamine, 51
Predaea ollivieri, 411
Predaea pusilla, 411
principal components analysis, 143
Protea Banks, 395
protease, 57
proteasome, 309
protein, 17
proteinase, 57
protists, 229
Ptilophora, 395
pulse amplitude modulated (PAM) fluorometry, 1
*rbc*L, 395
rDNA ITS, 243
red algae, 431
Redfield ratio, 173
reproduction, 293
Rhodomonas lens, 73
Rhodophyta, 43, 257, 369, 395, 411, 423
Ribosomal RNA, 351
rivers, 153
Roscoffia, 229
*rps*14-*atp*8 spacer, 235
Rubisco spacer, 235
RuBisCo spacer, 273
Rubisco, 431
salinity, 293
sand-dwelling, 229
Sarcoma 180 tumour, 67
Sargassum muticum, 293
saxitoxin, 361
Scrippsiella hexapraecingula, 105
seasonality, 153
seaweed, 285
sections, 213
sediment accumulation, 301
sex clock, 327
sexual reproduction, 327
small-subunit rDNA, 197
South Africa, 395
South African biodiversity, 197
Southern Ocean, 161
species identification, 197
spermidine, 51
spermiogenesis, 309
spine, 93
sporophytes, 411
SSU rDNA, 213
STA-CA-staining, 105
stability, 153
Stenopeltis, 257
sulphation, 67
systematics, 369
taxonomy, 93, 213, 317, 351, 369, 395
temperature, 9
Thecadinium, 351
thecal plate, 105
transcript abundance, 431
trophy, 143
tsFT210 cell, 67

ubiquitin, 309
ultrastructure, 181
universal primers, 43
vacuole, 117
xanthophyll cycle, 285